

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P841183

Luminaire Tested: **ARCH4-140-740-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-740-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17145 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

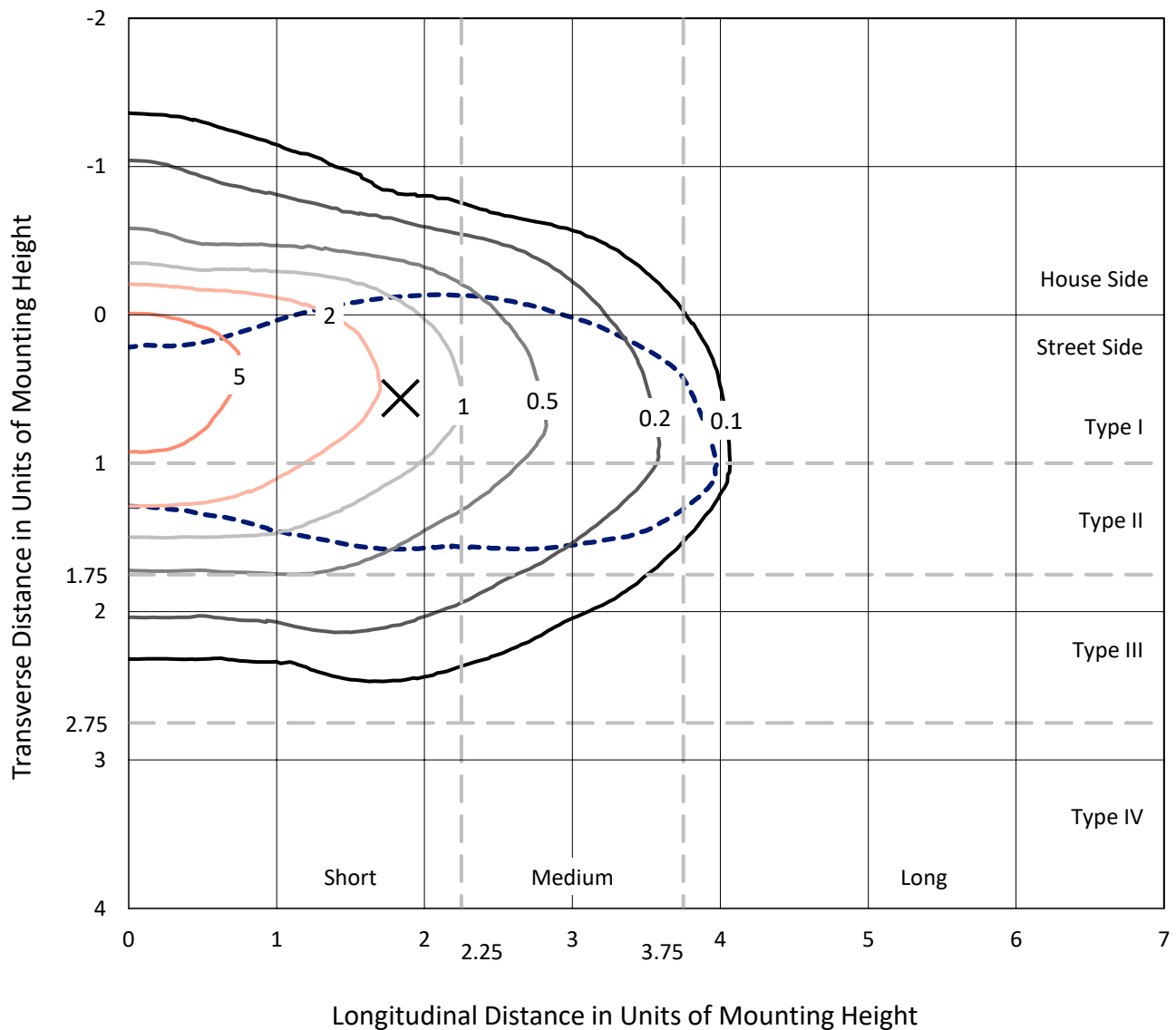
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

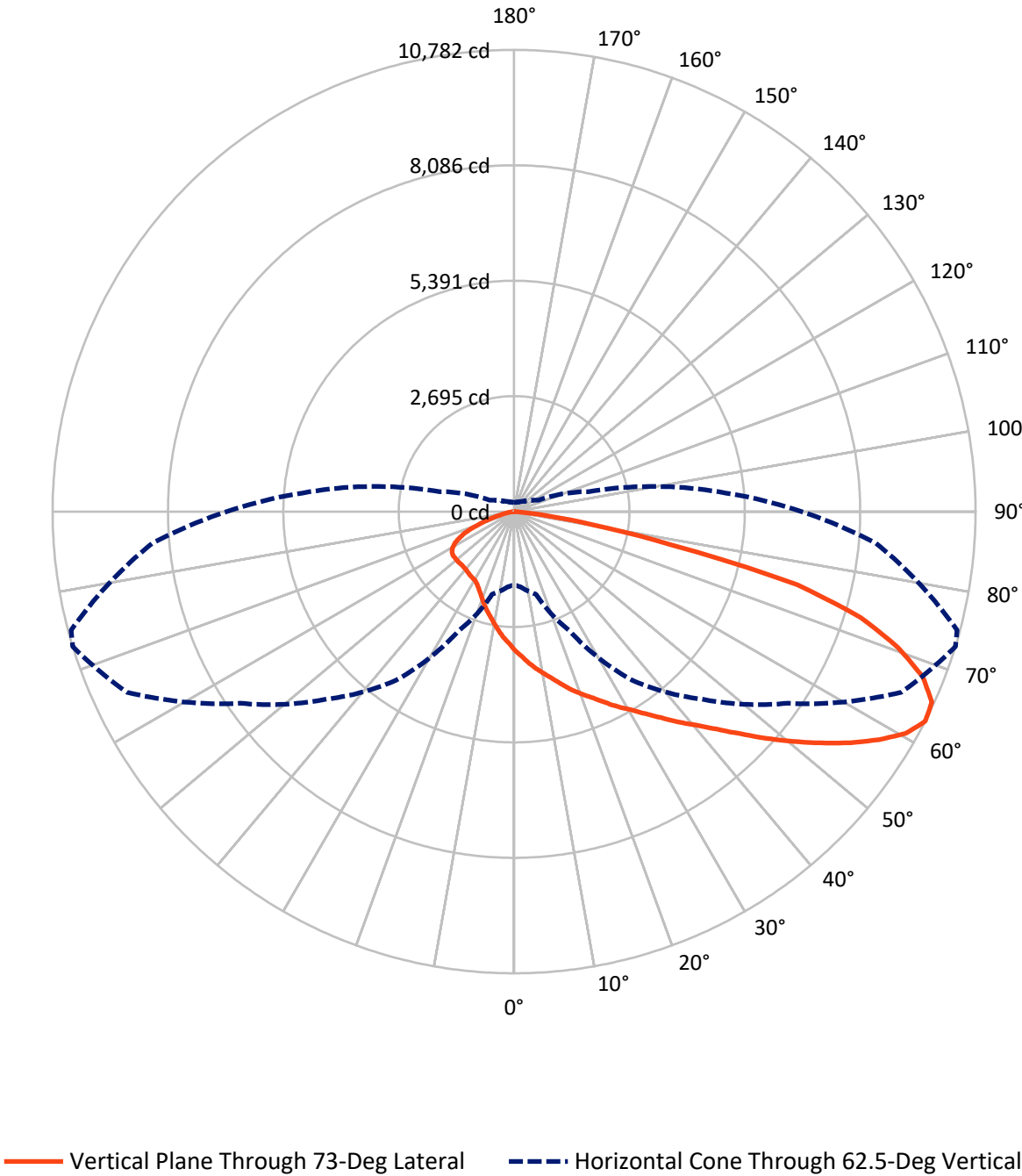
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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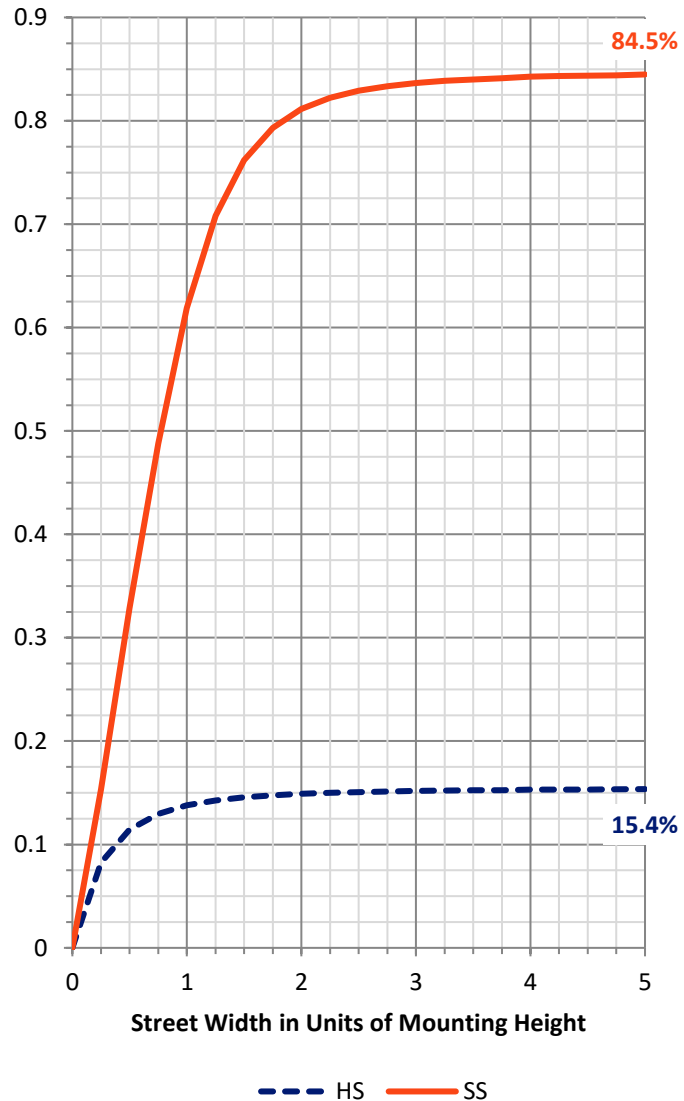
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2657.7	0.0	2657.7
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	14487.3	0.0	14487.3
	% Fixture	84.5	0.0	84.5
Total	Lumens	17145.0	0.0	17145.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.6	1.8
10°-20°	946.4	5.5
20°-30°	1575.3	9.2
30°-40°	2376.8	13.9
40°-50°	3322.2	19.4
50°-60°	3669.6	21.4
60°-70°	3196.7	18.6
70°-80°	1614.8	9.4
80°-90°	129.6	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	17145.0	100.0
0°-180°	17145.0	100.0

Coefficient of Utilization



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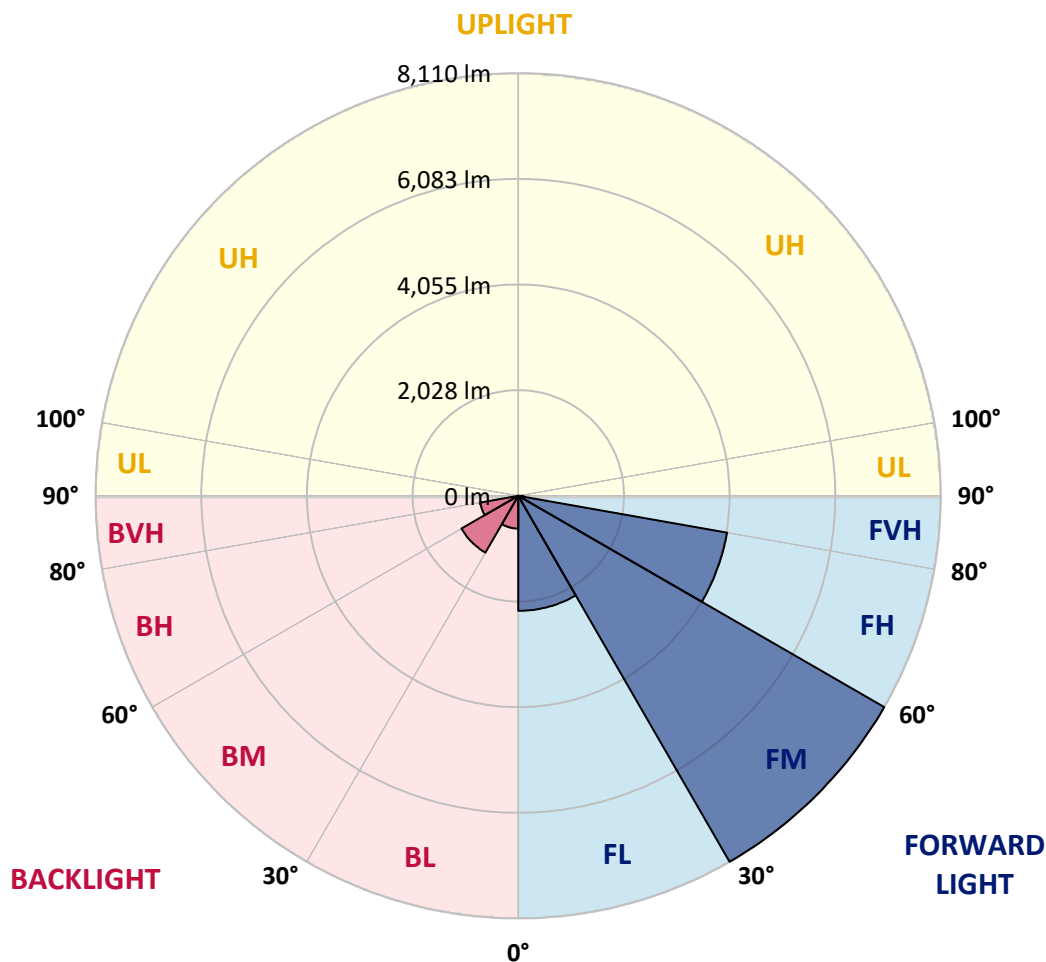
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2207.1	12.9			
FM	(30°-60°)	8110.2	47.3			
FH	(60°-80°)	4069.7	23.7			G2/5000
FVH	(80°-90°)	100.3	0.6			G2/225
BL	(0°-30°)	628.2	3.7	B2/1000		
BM	(30°-60°)	1258.4	7.3	B2/2500		
BH	(60°-80°)	741.8	4.3	B2/1000		G2/1000
BVH	(80°-90°)	29.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4
2.5°	3694.7	3735.8	3713.4	3728.4	3653.6	3605.1	3549.0	3440.7	3380.9	3373.5	3302.5
5°	4236.4	4281.3	4243.9	4232.7	4101.9	3989.9	3862.9	3672.3	3545.3	3522.9	3366.0
7.5°	4778.1	4819.2	4774.4	4740.8	4565.2	4367.2	4180.4	3900.2	3702.2	3664.9	3418.3
10°	5159.2	5196.5	5162.9	5129.3	4946.2	4744.5	4479.3	4113.2	3844.2	3784.4	3451.9
12.5°	5446.8	5469.3	5454.3	5424.4	5252.6	5035.9	4781.9	4352.2	4004.8	3930.1	3504.2
15°	5682.2	5719.6	5700.9	5678.5	5514.1	5297.4	5054.6	4602.6	4191.6	4098.2	3582.7
17.5°	5839.1	5865.3	5869.0	5869.0	5723.3	5510.4	5275.0	4830.4	4378.4	4258.9	3657.4
20°	5910.1	5940.0	5958.7	5988.5	5869.0	5685.9	5446.8	5024.7	4554.0	4419.5	3728.4
22.5°	5943.7	5969.9	6018.4	6085.7	5988.5	5835.4	5615.0	5204.0	4729.6	4587.6	3810.6
25°	5969.9	6003.5	6074.5	6201.5	6134.2	6003.5	5813.0	5409.5	4938.8	4793.1	3930.1
27.5°	6040.8	6081.9	6149.2	6302.4	6220.2	6156.7	6022.2	5629.9	5159.2	5009.8	4075.8
30°	6287.4	6321.0	6317.3	6414.4	6313.6	6294.9	6201.5	5842.8	5372.1	5222.7	4247.6
32.5°	6735.7	6769.3	6687.1	6649.8	6429.4	6433.1	6395.8	6070.7	5626.2	5473.0	4445.6
35°	7217.6	7255.0	7146.7	7083.1	6713.3	6605.0	6623.6	6354.7	5910.1	5756.9	4692.2
37.5°	7647.3	7692.1	7598.7	7505.3	7131.7	6881.4	6877.7	6672.2	6235.1	6078.2	4964.9
40°	7882.6	7934.9	7991.0	7938.7	7546.4	7269.9	7150.4	6997.2	6556.4	6395.8	5260.1
42.5°	7994.7	8140.4	8241.3	8207.6	7886.4	7606.2	7464.2	7337.2	6948.7	6791.8	5611.2
45°	7680.9	7684.6	7897.6	8080.6	8020.8	7834.0	7807.9	7718.2	7397.0	7247.5	6007.2
47.5°	7288.6	7258.7	7408.2	7733.2	7901.3	7949.9	8103.0	8140.4	7908.8	7759.3	6410.7
50°	6347.2	6365.9	6851.5	7318.5	7647.3	7961.1	8312.2	8573.7	8435.5	8293.6	6836.6
52.5°	5162.9	5207.8	5764.4	6791.8	7311.0	7849.0	8435.5	9007.1	8973.5	8839.0	7262.5
55°	4139.3	4210.3	4800.6	5913.8	6881.4	7598.7	8487.8	9403.1	9530.1	9406.8	7680.9
57.5°	3164.3	3239.0	3735.8	4879.0	6332.2	7191.5	8450.5	9750.5	10049.4	9970.9	8065.7
60°	2383.5	2458.2	2775.7	3956.3	5644.8	6735.7	8263.7	9978.4	10516.4	10434.2	8345.9
62.5°	1707.3	1767.1	2002.4	3078.3	4808.0	6194.0	7804.2	9982.2	10781.6	10714.4	8480.3
65°	1229.1	1229.1	1419.6	2196.7	4023.5	5544.0	7109.3	9522.6	10725.6	10706.9	8387.0
67.5°	885.4	892.9	1046.0	1535.4	3209.1	4755.7	6209.0	8704.5	10292.2	10385.6	8050.7
70°	627.6	646.3	717.3	1072.2	2424.6	3754.5	5245.1	7632.3	9511.4	9675.8	7400.7
72.5°	485.7	496.9	545.4	747.2	1770.8	2790.7	4180.4	6436.8	8469.1	8655.9	6515.3
75°	373.6	384.8	422.1	549.2	1270.2	1957.6	2970.0	4994.8	6829.1	7161.6	5233.9
77.5°	272.7	287.7	313.8	399.7	739.7	1244.0	1800.7	2809.3	3769.5	3926.4	2742.1
80°	127.0	145.7	183.1	257.8	399.7	586.5	638.8	1083.4	1811.9	1894.1	1486.9
82.5°	71.0	89.7	104.6	156.9	201.7	209.2	216.7	272.7	683.7	754.6	623.9
85°	33.6	44.8	48.6	67.2	67.2	59.8	71.0	52.3	112.1	134.5	130.8
87.5°	0.0	3.7	7.5	18.7	14.9	11.2	11.2	11.2	11.2	14.9	11.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4	3246.4
2.5°	3268.9	3220.3	3108.2	3011.1	2947.6	2891.5	2816.8	2783.2	2723.4	2734.6	2701.0
5°	3287.5	3197.9	2999.9	2816.8	2682.3	2562.8	2432.0	2357.3	2275.1	2267.7	2241.5
7.5°	3298.7	3160.5	2876.6	2618.8	2413.4	2230.3	2054.7	1957.6	1856.7	1834.3	1811.9
10°	3287.5	3104.5	2749.6	2413.4	2140.6	1912.7	1714.7	1591.5	1486.9	1460.7	1438.3
12.5°	3298.7	3074.6	2630.0	2222.8	1897.8	1640.0	1415.9	1288.9	1191.7	1165.6	1150.6
15°	3324.9	3055.9	2529.2	2051.0	1681.1	1393.5	1173.1	1064.7	986.3	960.1	952.6
17.5°	3347.3	3037.2	2420.8	1882.9	1464.4	1176.8	986.3	896.6	829.4	803.2	795.7
20°	3377.2	3011.1	2312.5	1722.2	1273.9	1004.9	836.8	758.4	706.1	687.4	683.7
22.5°	3403.3	2992.4	2211.6	1561.6	1098.3	866.7	724.8	661.2	623.9	605.2	605.2
25°	3470.6	2999.9	2125.7	1412.1	967.6	758.4	638.8	590.3	560.4	549.2	549.2
27.5°	3549.0	3029.8	2058.4	1285.1	855.5	676.2	579.1	538.0	523.0	508.1	511.8
30°	3661.1	3089.5	2013.6	1180.5	773.3	612.7	530.5	500.6	485.7	481.9	481.9
32.5°	3803.1	3186.7	2009.9	1113.3	713.5	564.1	496.9	470.7	463.2	459.5	459.5
35°	3971.2	3272.6	1987.5	1083.4	676.2	530.5	470.7	452.0	448.3	448.3	448.3
37.5°	4172.9	3414.6	1972.5	1042.3	657.5	511.8	452.0	437.1	437.1	437.1	437.1
40°	4382.1	3530.4	1950.1	1004.9	650.0	500.6	440.8	422.1	422.1	422.1	422.1
42.5°	4632.4	3698.5	1942.6	986.3	638.8	493.1	425.9	403.5	407.2	407.2	410.9
45°	4935.0	3889.0	1938.9	967.6	635.1	485.7	410.9	384.8	388.5	384.8	384.8
47.5°	5241.4	4109.4	1950.1	956.4	631.4	478.2	399.7	366.1	366.1	362.4	362.4
50°	5562.7	4311.2	1957.6	945.2	623.9	463.2	381.1	351.2	343.7	336.2	340.0
52.5°	5865.3	4497.9	1961.3	926.5	601.5	440.8	366.1	332.5	321.3	310.1	313.8
55°	6167.9	4677.3	1968.8	904.1	571.6	418.4	347.4	313.8	298.9	283.9	283.9
57.5°	6440.6	4834.2	1950.1	848.0	538.0	396.0	328.8	291.4	269.0	254.0	254.0
60°	6627.4	4946.2	1894.1	765.8	493.1	369.8	310.1	269.0	242.8	231.6	231.6
62.5°	6717.0	4964.9	1793.2	631.4	437.1	343.7	287.7	246.6	224.2	216.7	216.7
65°	6631.1	4882.7	1636.3	474.5	377.3	313.8	265.2	227.9	205.5	186.8	186.8
67.5°	6332.2	4651.1	1419.6	358.6	321.3	283.9	242.8	209.2	183.1	168.1	168.1
70°	5730.8	4169.2	1098.3	287.7	272.7	246.6	220.4	186.8	164.4	145.7	145.7
72.5°	4942.5	3534.1	773.3	231.6	231.6	209.2	186.8	164.4	142.0	127.0	127.0
75°	3791.9	2615.1	519.3	186.8	190.5	175.6	153.2	134.5	119.5	108.3	108.3
77.5°	2069.7	1292.6	317.5	138.2	142.0	134.5	119.5	108.3	100.9	89.7	89.7
80°	1004.9	567.8	183.1	97.1	100.9	97.1	89.7	78.5	78.5	71.0	71.0
82.5°	422.1	212.9	97.1	67.2	67.2	59.8	56.0	56.0	56.0	52.3	52.3
85°	104.6	41.1	41.1	37.4	37.4	37.4	33.6	33.6	33.6	26.2	29.9
87.5°	14.9	14.9	14.9	14.9	14.9	14.9	11.2	3.7	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)